Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A device for generation of a correction signal for use with a CRT, comprising:

an analog scanning processor configured to generate a correction signal that is proportional to $Kx^2 + (1-K)x^4$, where x is the distance from a mid point of a viewing surface of the CRT, and K is a real number in the range 0.00 to 1.00.

2. (Currently Amended) The device of claim 1 wherein the dynamic correction signal is a horizontal ~~dynamic~~ focus correction signal.

3. (Currently Amended) The device of claim 1 wherein the dynamic correction signal is a vertical ~~dynamic~~ focus correction signal.

4. (Previously Presented) The device of claim 1 wherein the processor is arranged to generate a plurality of dynamic correction signals.

5. (Previously Presented) The device of claim 1, comprising means for generating a dynamic brightness correction signal.

6. (Previously Presented) The device of claim 5 wherein the dynamic correction signal for use in a horizontal direction is different than the dynamic correction signal for use in a vertical direction.

7. (Previously Presented) The device of claim 1 wherein the processor includes a shape adjustment circuit arranged to receive as inputs:

- a sawtooth waveform at the deflection frequency;
- a shape control signal; and
- an amplitude control signal,

wherein the shape adjustment circuit is arranged to produce a signal that approximates closely to the sawtooth input waveform raised to a power n, where n is a real number.

8. (Previously Presented) The device of claim 7 wherein the value of n is in the range 2.00 to 4.00

9. (Previously Presented) The device of claim 1 wherein the processor includes a first output signal (Out_1) and a second output signal (Out_2) generated in accordance with the following:

$$Out_1 = H_{amp} \times H_{phasesize}^2 \times [H_{shape} + (1 - H_{shape}) \times H_{phasesize}^2] \, V_{amp} \times V_{sawtooth}^2$$
$$Out_2 = V_{bright} \times V_{sawtooth}^2$$

where:

$H_{sawtooth}$ is a sawtooth waveform at the horizontal deflection frequency (normalized and centered);

$V_{sawtooth}$ is a sawtooth waveform at the vertical deflection frequency including vertical size and position information;

V_{bright} is an amplitude adjustment for the dynamic brightness control;

V_{amp} is the vertical amplitude control;

H_{amp} is the horizontal amplitude control;

H_{shape} is the horizontal shape control;

H_{phase} is the horizontal phase control;

H_{size} is the horizontal size control; and

$H_{phasesize} = (H_{sawtooth} + H_{phase}) \times (1 + H_{size})$.

10. (Previously Presented) A CRT monitor having an electron gun, comprising:

an analog scanning processor for generation of a dynamic correction signal for use with the CRT monitor, the dynamic focus correction signal generated to be proportional to $Kx^2 + (1\text{-}K)x^4$, where x is the distance from a mid point of a viewing surface of the CRT monitor and the electron gun, and K is a real number in the range 0.00 to 1.00.

11. (Previously Presented) The CRT monitor of claim 10 wherein the processor includes a shape adjustment circuit having a first input coupled to the output of an automatic gain control circuit configured to generate a squared parabolic waveform signal, the shape adjustment circuit configured to process the squared parabolic waveform to produce two output signals.

12. (Previously Presented) The CRT monitor of claim 11 wherein the dynamic correction signal is a horizontal dynamic focus correction signal.

13. (Previously Presented) The CRT monitor of claim 10 wherein the dynamic correction signal is a vertical dynamic focus correction signal.

14. (Previously Presented) The CRT monitor of claim 10 wherein the processor is arranged to generate a plurality of dynamic correction signals.

15. (Previously Presented) The CRT monitor of claim 10, further comprising means for generating a dynamic brightness correction signal.

16. (Previously Presented) The CRT monitor of claim 15 wherein the dynamic correction signal for use in a horizontal direction is different than the dynamic correction signal for use in a vertical direction.

17. (Previously Presented) The CRT monitor of claim 12 wherein the shape adjustment circuit is configured to receive as inputs a shape control signal and an amplitude control signal and to produce a signal that approximates closely to the sawtooth input waveform raised to a power N, where N is a real number.

18. (Previously Presented) The CRT monitor of claim 17 wherein the value of N is in the range of 2.00-4.00.

19. (Previously Presented) The CRT monitor of claim 11 wherein the shape adjustment circuit output signals comprise a first output signal (Out_1) and a second output signal (Out_2) that are generated in accordance with the following:

$$Out_1 = H_{amp} \times H_{phasesize}^2 \times [H_{shape} + (1 - H_{shape}) \times H_{phasesize}^2]\ V_{amp} \times V_{sawtooth}^2$$
$$Out_2 = V_{bright} \times V_{sawtooth}^2$$

where:

$H_{sawtooth}$ is a sawtooth waveform at the horizontal deflection frequency (normalized and centered);

$V_{sawtooth}$ is a sawtooth waveform at the vertical deflection frequency including vertical size and position information;

V_{bright} is an amplitude adjustment for the dynamic brightness control;

V_{amp} is the vertical amplitude control;

H_{amp} is the horizontal amplitude control;

H_{shape} is the horizontal shape control;

H_{phase} is the horizontal phase control;

H_{size} is the horizontal size control; and

$H_{phasesize} = (H_{sawtooth} + H_{phase}) \times (1 + H_{size})$.

20. (Previously Presented) A method of dynamic correction in a CRT monitor having an electron gun, the method comprising:

generating an output from the electron gun; and

generating a correction signal for the output of the electron gun that is proportional to $Kx^2 + (1-K)x^4$, where x is the distance from a mid point of a viewing surface of the CRT monitor and the electron gun, and K is a real number in the range 0.00 to 1.00.

21. (Previously Presented) The method of claim 20 wherein generating the correction signal comprises receiving on an input of a shape adjustment circuit an output from an automatic gain control circuit that is a squared parabolic waveform, and also receiving a shape control signal and an amplitude control signal and producing a signal that approximates closely to a sawtooth input waveform raised to a power N, where N is a real number.

22. (Previously Presented) The method of claim 21 where N is in the range of 2.00-4.00.

23. (Previously Presented) The method of claim 21 wherein the squared parabolic waveform is split into two components and separately processed to produce a first output (Out_1) and a second output (Out_2) that is generated in accordance with the following:

$$Out_1 = H_{amp} \times H_{phasesize}^2 \; X \; [H_{shape} + (1 - H_{shape}) \times H_{phasesize}^2] \; V_{amp} \times V_{sawtooth}^2$$
$$Out_2 = V_{bright} \times V_{sawtooth}^2$$

where:

$H_{sawtooth}$ is a sawtooth waveform at the horizontal deflection frequency (normalized and centered);

$V_{sawtooth}$ is a sawtooth waveform at the vertical deflection frequency including vertical size and position information;

V_{bright} is an amplitude adjustment for the dynamic brightness control;

V_{amp} is the vertical amplitude control;

H_{amp} is the horizontal amplitude control;

H_{shape} is the horizontal shape control;

H_{phase} is the horizontal phase control;

H_{size} is the horizontal size control; and

$H_{phasesize} = (H_{sawtooth} + H_{phase}) \times (1 + H_{size})$.

24. (Previously Presented) The method of claim 20, further comprising generating a dynamic brightness correction signal.

25. (Previously Presented) The method of claim 24 wherein generating the correction signal comprises generating a dynamic correction signal for use in a horizontal direction and a second dynamic correction signal for use in a vertical direction that is different than the dynamic correction signal for use in a horizontal direction.